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ABSTRACT

A telephone survey was conducted in the TV Ontario major market areas to determine the potential for television based learning systems, which would include a television component, a variety of possible print components, and access to individual or group instruction by telephone or in person. The potential audience for a learning system of this type was examined, as well as possible topics of interest. The most desirable format and content were also analysed to determine the directions for future television based courses of study. The data are based on 1,242 telephone interviews with individuals 18 years or old or older, living in Toronto, London, or the Ontario part of Ottawa. This report describes the survey methodology and provides a profile of the sample population in terms of demographic data, television viewing habits, and adult learning experiences. Findings include the subjects' awareness of and desire to participate in such a system, as well as preferred subject areas and format, perceived advantages and disadvantages of this type of study, and their attitude toward television-based learning systems. A discussion of the findings and recommendations conclude the report. (JEG)

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POTENTIAL FOR TELEVISION-BASED LEARNING SYSTEMS

FINAL REPORT

by:

Rand Nickerson: Manager, Office of Project Research

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1979

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The Ontario Educational Communications Authority

Research and Planning Division

ABSTRACT - 26

POTENTIAL FOR TELEVISION-BASED LEARNING SYSTEMS
FINAL REPORT

by:

Rand Nickerson, Manager
Goody Teachman, Project Consultant

(OECA Office of Project Research, Report Number 26, January, 1979)

The data presented in this report are based on 1,242 telephone interviews with randomly selected individuals, 18 years or over, living in three major urban areas (Toronto, London and Ottawa) within the TVOntario signal.

The respondents were evenly divided as to sex. The ages were approximately distributed along a curve conforming to that of the general public, with the largest group (71 percent) between 21 years and 49 years. Thirty-six percent of the sample were under 30 years of age, while 19 percent were over 50 years old.

A similar stratification of educational background, occupation and income was also noted. The group reported an average of 15 hours per week of television viewing, almost exclusively on the commercial networks.

In most cases, results are safely generalizable from the respondents group to a major portion of the potential TVO audience. The demographic details of the respondent group approximately correspond to those of the urban Ontario population.

Although most of the sample are no longer full-time students, over one third have been involved in some form of formal learning activity during the past 12 months. These activities took place in a variety of academic and non-academic settings. Twenty-two percent of the courses were taken for a credit towards some type of diploma or degree, while one third were a form of training course or work-related program.

There are many types of personal learning projects possible, ranging from reading about a certain subject to acquiring a new skill or sport. In the present sample, 39 percent had initiated some type of self-directed learning during the past year.

Within the sample, 8 percent were identified as full-time learners, while 67 percent perceived themselves as part-time learners, having been involved in some form of learning activity over the past 12 months. The remaining 25 percent perceived themselves as non learners. These categories are consistent with those used by I. Waniewicz, in Demand for Part-Time Learning in Ontario, OECA, 1976.

Of the total respondents, over 60 percent indicated that they would be interested in participating in some form of television-based learning. Interest was notably high among those in the 21-to-29 year age category in comparison with other age categories, and among those who classified themselves as part-time learners as opposed to those who classified themselves as non learners. Interest was notably low among those 60 years of age and over.

Among those who indicated that they were not interested in learning something through television (N=481), the most frequent reason given was a lack of time to pursue such activities.

When all respondents were asked what they perceived as the major advantage of television-based learning, the most frequent response mentioned the convenience of studying at home. Other advantages included freedom from academic pressures and freedom to alter a course of study. The advantage of studying at home was particularly important to respondents with children at home, homemakers, and the retired.

The most frequently mentioned disadvantage of a television-based learning system was the possibility of interruptions or distractions by other household members, visitors or the telephone. A further concern was that the format might lead to their missing personal instruction, or that the fixed pace of study might lead to their not completing their studies.

The preferred format of a television learning system was examined, with those indicating initial interest in the concept as a data base. Eighty-six percent of these respondents would prefer a course of this type to be offered in the winter, as opposed to less than 30 percent who would prefer spring or summer. The majority of the respondents favored a course load of two programs per week, broadcast weekday evenings.

The desired subject areas may be divided into academic (also including vocational and professional interests) and non academic subjects.

The most strongly preferred academic subjects for television-based courses of study were French and history; while the most strongly preferred non academic courses are business-related subjects, including management, accounting, and computer technology. There is also a market for a number of hobby or recreational courses, including arts and crafts, and repair and maintenance.

A number of respondents would like an academic course to be structured to include some systematic evaluation or official recognition (e.g., a recognized credit in an academic institution), although there is less desire in a non academic course for either evaluation or recognition.

Differences in preferred content were also noted. Respondents indicated that most of the information in an academic course should be provided by supplementary materials, with the television programs used for illustration and to stimulate interest in the subject matter. Conversely, most of the information in a non academic course should be provided by the television programs, with little or nothing remaining to be studied from books or other sources.

Finally, the potential viewers felt that successful completion of a course should be possible without participation in such outside activities as group meetings or field trips. However, they would like these to be available as an enrichment to the course content.

In summary, these data suggest that there is a strong desire for a television-based learning system in the major urban centres of Ontario. This demand becomes even stronger when the potential audience is made more fully aware of the possible options. Depending on the specific subjects, there are differences in both the potential participants and the course structure.

As the general population ages and its leisure time increases, the potential of television-based learning systems will also increase. A system of this type is both convenient and flexible for a large segment of the population. It appears that television-based learning systems could play a large part in meeting the educational needs of adults in this province in the future.

Specific recommendations for the future development of television-based learning systems at the OECA include the following.

1. Given the current interest in and lack of opportunities for television-based learning, the OECA should develop these learning systems for their viewing audience.

2. The desired subject areas for these learning systems may be divided into academic (also including vocational and professional interests) and non academic topics; and they should be presented in quite different ways.

3. The most strongly preferred academic areas for future television-based courses of study, French and history, should be considered for detailed development.

4. The most strongly preferred non academic areas for future television-based courses of study (business-related subjects, including management, accounting and computer technology) should be considered for further development.

5. Most information in an academic course should be provided by supplementary materials, with the television programs used for illustration and to stimulate interest in the subject matter.

6. Most information in a non academic course should be provided by the television programs, with little or nothing remaining to be studied from books or other resources.

7. The average cost of a television-based course should be $25, with the cost of a non academic course somewhat lower, and the cost of an academic course somewhat higher, depending on the amount of supplementary material provided for each course. No course fee should exceed $50.

8. That the best format for a television-based learning system is two programs per week, broadcast weekday evenings.

9. That the best time of year for presentation of a television-based learning system is winter, although there is a smaller but still significant potential audience in the fall. The proportion of those interested in television-based courses in the summer is very small, in comparison.

TABLE OF CONTENTS

	Page
INTRODUCTION	1
METHODOLOGY	1
SUBJECTS	3
A. Demographic Data	3
B. Television Viewing Habits	4
C. Adult Learning Experiences	5
FINDINGS	6
A. Awareness of Television-Based Learning System	6
B. Sources of Awareness	7
C. Desire to Participate in a Television-Based Learning System	8
D. Subject Areas for Potential Television-Based Learning Systems	9
1. GENERAL EDUCATION	9
2. VOCATIONAL AND PROFESSIONAL EDUCATION	9
3. HOBBY AND RECREATION	10
4. HOME AND FAMILY	10
5. PERSONAL DEVELOPMENT	10
6. COMMUNITY AND PUBLIC AFFAIRS	10
E. Breakdown of Subject Preferences	13
F. Preferred Structure of Television-Based Learning Systems	14
1. FORMAT	14
2. BROADCAST TIME AND SEASON	14
3. LEARNING SYSTEM COMPONENTS	15
4. ROLE OF TELEVISED CONTENT	17
5. FORMAL STUDENT EVALUATION AND CREDIT	18
6. COST	19
G. Perceived Advantages and Disadvantages of Television-Based Learning	20
H. Appeal of Television-Based Learning	21
DISCUSSION	23
RECOMMENDATIONS	26

INTRODUCTION

The major objective was to determine the potential for television-based learning systems in Ontario

The purpose of this study was to determine the potential for television-based learning systems (as reflected in TVOntario's Academy concept) for residents within TVOntario major market areas. These systems include a television component, a number of possible print components, and access to individual or group instruction, either by telephone or in person.

The potential audience for a learning system of this type was examined, as well as possible topics of interest. The most desirable format and content were also analyzed in order to determine the directions for future television-based courses of study.

METHODOLOGY

The data presented in this report are based on 1,242 telephone interviews with individuals, 18 years of age or over, living in Toronto, London or the Ontario part of Ottawa. (See Table A-1)

Table A-1: Summary of Assigned Contacts and Completions

Census Metro Area - 1971 Census	Population 18 Years Plus	%	Residential Telephone Numbers Drawn	Completed Interviews	Completion Rate
Toronto	1,789,425	78.4	1,568	961	61.3
Ottawa (Ont. part)	300,295	13.2	264	180	68.1
London	190,975	8.4	168	101	60.1
	2,280,695	100.0	2,000	1,242	62.1

1,242 telephone interviews were conducted with adult residents

Interviewers were provided with a total of 2,000 residential telephone numbers, randomly drawn from the most recent local telephone directories, and instructed to make at least three attempts to contact a responsible person within these specified households.

After successful contact had been made, the caller conducted the interview with a randomly selected adult from among the household members 18 years of age or older.

All interviewing was done by trained, experienced and closely supervised interviewers of the Institute of Opinion and Market Research Ltd. primarily during the evening and weekend hours between October 21 and 28, 1977. In addition, a number of contacts were made during the day in cases where attempts during the previous evening were unsuccessful in reaching the household.

SUBJECTS

A. Demographic Data

A total of 1,242 people was successfully contacted by telephone. Of these, 48 percent were male. The subjects ranged in age from 18 years to over 60 years. The ages were approximately distributed along a curve conforming to that of the general public, with the largest number of subjects (71 percent) falling into the middle groups of 21 years to 49 years. Toward the ends of the age spectrum, 36 percent of the respondents were under 30 years of age, while 19 percent of the respondents were over 50 years. (See Table A-1)

The respondents were generally representative of the TVOntario audience in age, sex, education, and occupation

There was a great variation in educational attainment among the subjects. Twenty-six percent reported having some secondary school education, while a further 39 percent had completed high school or commercial and technical training. Over one third of the sample (35 percent) had attended university, with 52 percent of these completing a degree program. The majority of the respondents had received this education in North America.

The occupations of the sample may be categorized as shown in Table 1:

Table 1: Occupation of Respondents

	Percentage
Professional	24
Homemaker	23
Skilled/Unskilled Worker	14
Clerical	10
Manager/Owner	9
Student	8
Sales	5
Retired	4
Unemployed	1
Other	2
	100

With the exceptions of the retired group, which is slightly underrepresented, all of these occupational groups are within a few percentage points of the occupational proportions of the general TVOntario audience. (OECA Utilization Research, 1977)

The respondents also reported a broad range of family incomes. A small proportion of the sample (8 percent) indicated an annual household income of under $7,000, with a further 6 percent reporting a ceiling income of less than $10,000. The middle income levels of $10,000 to $15,000 (18 percent) and $15,000 to $20,000 (20 percent) were well represented, while another 21 percent of the subjects reported their total family income as falling between $20,000 and $30,000. The remaining 15 percent indicated a household income of over $30,000.

B. Television Viewing Habits

The participants in the survey were asked how many hours of television they watch in an average week. One third (33 percent) reported a total weekly viewing of five hours or less. A further 25 percent of the sample said they watch television six to ten hours a week. The remainder of the sample reported viewing as follows: 16 percent watch 11-15 hours per week, 13 percent watch 16-20 hours per week, 6 percent watch 21-25 hours per week, 3 percent watch 26-30 hours per week, and the balance of 4 percent watch more than 30 hours per week. As a measure of comparison, the average weekly television viewing for adult Canadians is approximately 24 hours per week. This suggests that the present sample watches significantly less television than the general viewing public.

The present sample watches significantly less television than the average viewer

Although the bulk of the respondents' viewing was directed to commercial television, 46 percent of the sample also reported viewing educational television stations (defined as those stations that carry no commercials) at least part of the time. Of these, 27 percent of the sample watch ETV one or two hours a week and a further 11 percent watch three or four hours. A small proportion reported watching educational television more than four hours per week (8 percent). This appears comparable with the average weekly viewing time of the TVOntario adult audience of one hour, 45 minutes. (BBM, January 1977)

Almost half the sample watch educational television

C. Adult Learning Experiences:

Over one third had been involved in a learning activity in the past year

Although most of the sample are no longer full time students, over one third (38 percent) have been involved in some form of learning activity during the past 12 months.

These activities took place in a variety of academic settings including universities (13 percent), community colleges (8 percent), high schools (11 percent), technical business or other trade schools (11 percent), and through correspondence (3 percent). In some cases, more than one course was taken, and in more than one setting.

Almost one quarter had taken a course for credit toward a degree or diploma

Of the above courses, 22 percent were taken for a credit towards some type of diploma, degree or qualification. Almost one third of the sample had taken part in a training course or work-related program. A further small percentage (6 percent) had participated in a course organized by their employer, but not related to their occupation.

Lectures or courses in non academic settings were attended by 32 percent of the sample. These were offered by community groups, museums, libraries, churches and public service organizations. Courses not related to regular school courses but offered by the local school boards were attended by a small proportion of the sample as well. In addition, 28 percent of the respondents were members of clubs or groups that meet for specific interests or hobbies, such as book clubs, movie or film clubs, or sports clubs.

39 percent had engaged in a "personal learning project"

There were also many types of "personal learning projects" ranging from reading about a certain subject to acquiring a new skill or sport. In the present sample, 39 percent had initiated some type of self-directed learning during the past 12 months.

3 percent had taken a course through ETV or radio

Finally, a small proportion of the survey (3 percent) had been involved in studies through an educational program broadcast on television or radio.

Two thirds of the sample are "part-time learners"

In summary, within the sample, 8 percent may be identified as full-time learners; while 67 percent may be considered part-time learners, having been involved in some form of learning activity over the past 12 months. The remaining 25 percent may be designated as non-learners.*

*These learning categories are similar to those designated by Ignacy Waniewicz, Demand for Part-Time Learning in Ontario, OECA, 1976.

FINDINGS

A. Awareness of Television-Based Learning System

39 percent were familiar with television-based learning systems before contact

The respondents were asked if they had heard of television-based learning before the telephone contact. Of the total sample, 39 percent indicated previous awareness of this concept. Males were as likely as females to have this knowledge, but there was a significant age difference, with the younger subjects more likely to have heard of television-based learning than the older subjects. For example, only 25 percent of those over 50 years old had heard of the concept as compared with 40 percent of those under 50 years old ($p < .001$).

Occupationally, there was no significant difference in awareness, with the exception of retired people, who were less likely to be familiar with the concept.

Awareness is related to age, education and income

However, a relationship was noted between both education and income level and the degree of familiarity with television-based learning. Over half of those respondents who had a minimum educational attainment of secondary school had heard of the concept, compared with 30 percent of those who had not completed high school ($p < .001$). Similarly, the greater the income level, the more likely the awareness of the sample. For those with an annual household income of under $10,000, 22 percent knew of television-based learning compared with 47 percent of those with an income more than $30,000 ($p < .001$).

More learners than non learners are aware of television-based learning systems

A relationship was also found between the learning classification of the respondent (as described above) and his/her familiarity with the television-based learning concept. Almost one third (41 percent) of the full-time learners and 46 percent of the part-time learners indicated awareness of these systems, while only 23 percent of the non learners did so.

In summary, awareness of television-based learning appears to be related to age, education, income levels and current learning activities.

B. Sources of Awareness

25 percent learned of the concept through the OECA

The respondents were questioned as to the sources of their awareness of the concept. This awareness appeared to be derived from a variety of sources with the OECA chief among those identified (25 percent). An academic environment (19 percent), print advertisements (10 percent), or radio (6 percent) were also cited as providing this awareness. The balance of the sample was unable to identify their original source of awareness.

Most knew of an educational television network, but fewer could identify the OECA specifically (78 percent and 45 percent)

Although most of the sample did not perceive their awareness of television-based learning as derived from the OECA, the majority (78 percent) indicated that they were aware that Ontario has an educational television station. This proportion remained constant, whatever the current learning involvement or interest in television-based learning. These respondents, however, were not all able to identify the network correctly. Of those reporting awareness of the station, only 58 percent were able to name either the station or channel. This represents 45 percent of the total sample.

More learners than non learners were able to identify OECA

There was a strong relationship between learning category and familiarity with the OECA, with 75 percent of the full-time learners knowing a designation for the Authority, while 59 percent of the part-time learners and only 48 percent of the non-learners had this knowledge.

Few respondents could identify an OECA TV-based learning system by name (13 percent)

Fewer participants had heard of OECA Summer Academy. Almost 20 percent of the sample recognized this name, but fewer (13 percent) were able to recall the name of one of the courses that had been offered. None of the non learners was familiar with these course offerings.

It appears that awareness of a television-based learning system stems primarily from television or from an academic institution, with the OECA or an educational television network most frequently identified as a source. However, not all of those aware of the existence of an ETV station are able to identify OECA correctly. The heavier the learning involvement of the respondents, the more likely they were to make the identification.

C. Desire to Participate in a Television-Based Learning System

61 percent indicated interest in participating in television-based learning

At the beginning of the telephone contact, the respondents were asked, "How interested would you be in participating in some form of television-based learning?" In response, 17 percent indicated that they would be "very interested" in this concept and a further 44 percent were "somewhat interested". The remaining 39 percent were "not very interested" or "not at all interested".

There were clear patterns of differences in those exhibiting interest in participation. The age of the respondent was a significant factor ($p < .001$), with those under 50 years of age more interested than those over 50 years. Similarly, there was a relationship between education and interest, and income level interest ($p < .001$), suggesting that the better educated and/or those with a higher household income were more likely to be interested in participating in television-based learning.

This interest appeared related to:

- age
- education
- income
- ETV viewing
- current learning systems

The amount of general television viewing did not appear to be related to this interest. However, heavy viewers of educational television were more likely to show a desire to participate than were light viewers. In addition, current learning involvement appeared to be a determining factor in this interest, with both part-time learners (68 percent) and full-time learners (61 percent) more interested than non learners (43 percent) in being involved with this form of learning system (p .001).

Those interested in participating in a television-based learning system tended to be between 20 and 50 years of age, with an educational background and income above the norm.

Overall, those interested in participating in a television-based learning system tended to be between 20 and 50 years of age, with an educational background and income above the norm. These respondents also watch more educational television than the general public and engage more often in learning activities.

When questioned directly, 39 percent indicated little or no interest in participating in a television-based learning system. These respondents were asked to state their reasons.

Those indicating no interest most frequently mentioned lack of time as the reason

The most frequently mentioned drawback to this type of learning was time. Over one third indicated that they were too busy or that the system would be too time-consuming. A further 11 percent said that they do not enjoy watching television, or do not watch enough television for this type of system to be of use. Another 10 percent of the respondents felt that they had no need to further their education, and/or they had received enough learning. A variety of other reasons for lack of interest were offered by a smaller number of respondents.

D. Subject Areas for Potential Television-Based Learning Systems

"General education" courses were most mentioned by the sample

A total of 1,281 different subject areas was mentioned by the respondent. These may be (approximately) grouped into six areas: general education, vocational, professional education, hobby, recreation, personal development, home, family, and community/ public affairs. Of these, general education was most frequently mentioned, with almost half the subjects mentioned falling into this general category.

1. GENERAL EDUCATION

A television-based course on a foreign language was most often mentioned as a desirable area of study

A great diversity of subjects may be considered as in the domain of general education. The most frequently mentioned subject area for a television course was foreign languages, which received 147 mentions. Of these, French was mentioned most frequently (82 times). Both German and Spanish were suggested four times each, while the remainder referred to the general area of languages without a specific language preference given.

History was the most frequently mentioned individual subject for a desirable television course of study

Another strongly desired subject for a course of this type was history. This was mentioned 101 times, and was the most frequently mentioned individual topic as a desirable television course of study. Following this in popularity, the academic subjects of math (55 mentions) science (38 mentions) and geography (31 mentions) were suggested. In addition, a fairly large number of respondents indicated interest in English (25 mentions) or English literature/drama (16 mentions).

Finally, such social science subjects as psychology (31 mentions), social studies/ sociology (25 mentions) and art/fine arts/ art appreciation (31 mentions) were seen as desirable.

2. VOCATIONAL AND PROFESSIONAL EDUCATION

There were clearly preferred areas of study in vocational or professional education.

Business-related subjects were most frequently mentioned for television-based vocational and professional education

Business-related subjects were mentioned a total of 129 times by the respondents. Included in these were business management studies/ administration (37 mentions), accounting/ bookkeeping/auditing (38 mentions) and economics (17 mentions). In this general area, computer technology/programming science was also mentioned 26 times.

Further vocational interests referred to by 17 respondents may be subsumed in the category: "Medically related topics." Within this, X-ray diagnosis, surgery, kinesiology, physiology and genetics were referred to.

3. HOBBY AND RECREATION

Arts and crafts courses were of most interest within hobby and recreation topics

Television courses in subjects relating to an individual's recreational activities were mentioned 190 times. Among these, many types of arts and crafts were referred to most frequently (76 mentions). Similarly, a number of sports were mentioned as potential television courses (33 mentions). Finally, music (28 mentions) and theatre/drama (11 mentions) were seen as potentially desirable courses.

4. HOME AND FAMILY

Television-based courses in home repair were frequently mentioned under home and family topics

There was considerable interest in courses related to the home and family (187 mentions). Most frequent among these were courses in repair (64 mentions) and automechanics mentioned most frequently (35 mentions). The traditional subjects of cooking (35 mentions) and sewing/dressmaking (19 mentions) were also seen as desirable.

In addition to the previously mentioned courses in psychology, a number of areas that centre around child behavior and parent education were referred to 26 times by the respondents.

5. PERSONAL DEVELOPMENT

Courses related to psychology or personal growth were reported as interesting to many respondents

It is difficult to separate the references to human relations (13 mentions) and personal development/growth (17 mentions) from references to some of the social sciences discussed above. However, these and other personally relevant subjects were mentioned 37 times. Possibly related to personal development, religion was suggested as a suitable subject area for a television course 13 times.

6. COMMUNITY AND PUBLIC AFFAIRS

The sample showed some interest in politics as a television-based course

A number of subjects on the role of the public sector were suggested (43 mentions). Among these, political concerns appears most prominently, although referred to in a variety of terms (e.g., politics, international politics, political science or government operations).

In summary, no one subject was perceived as most desirable by the sample for a television-based learning system. Rather, a variety of subjects, as discussed above, appeared to meet different needs within the group. A summary of total subject level interest is provided in Table 2.

Table 2: Interest in Topics, by Subject Category

Subject Category	Topic	Percentage of Mentions Within Subject Category
General Education (587 Mentions)	Foreign Languages	25
	History	17
	Mathematics	9
	Science - specific disciplines	8
	Science - general	5
	Psychology	
	Fine Arts/Art Appreciation	5
	Geography	5
	Social Studies/Sociology	4
	English	4
	Literature/Plays/Drama	3
	Other	8
		100
Vocational & Professional Education (176 Mentions)	Business Management Studies/ Administration	21
	Accounting/Bookkeeping/Auditing	21
	Computer Technology/Programming	15
	Medically related topics	10
	Economics	10
	Electronics	3
	Secretarial	3
	Instrumental Music/Music	3
	Other	14
		100
Hobby & Recreation (190 Mentions)	Arts and Crafts	40
	Sports	17
	Music	15
	Theatre/Drama	6
	Yoga/Gymnastics/Exercise	4
	Other	18
		100
Home and Family (187 Mentions)	Automechanics	19
	Home Repair/Improvement/Maintenance	16
	Cooking	19
	Child Care/Parenting	14
	Sewing/Dressmaking	10
	Health/First Aid/Preventive Medicine	5
	Plant Care/Gardening	5
	Sex Education	2
	Other	10
		100
Personal Development (51 Mentions)	Personal Development/Growth	33
	Human Relations	25
	Religion	25
	Communications Skills	17
		100
Community and Public Affairs (43 Mentions)	Politics/Political Science	84
	Government Affairs	16
		100

E. Breakdown of Subject Preferences

There was a large variation in subject preference, dependent on a number of factors. A sex difference in general area of interest was noted, with women more interested in those topics under the general heading "home and family." In contrast, the men in the sample exhibited almost twice as much interest in "vocational and professional" topics as the women ($p < .001$).

Women preferred "home and family" topics while men preferred "vocational and professional" topics

Age differences in interest was also apparent, with those under 50 years old finding vocational and professional topics more appealing than those over 50 years found them. Those between 30 and 50 years were also more interested in subjects related to home and family than were either the very young or the very old ($p < .01$).

The age group of 30-50 years was most interested in "home and family" topics

There were no significant differences in the educational levels of those interested in vocational and professional topics, in comparison with other groups. However, those with at least highschool education were more interested in general education than were those who had not completed high school. The group with less education exhibited significantly greater interest in areas related to hobbies or recreation ($p < .01$).

There was a relationship between level of education and subject area preference

Respondents with a North American education had a stronger preference for hobbies/recreational or home/family topics than did those educated outside North America, while the latter were more interested in vocational/professional topics ($p < .01$).

There were no clear differences in preference related to occupational status or income for those currently in the work force. However, both homemakers and the retired had less interest in either vocational/professional areas or general education than the rest of the groups. The homemakers indicated more interest in courses relating to home and family, while the retired preferred community or public affairs.

Area of interest was related to occupational status

Heavy television viewers showed a stronger preference for hobby/recreation topics than lighter viewers. The light television viewers were more interested in vocational/professional topics.

There was a relationship between amount of television viewed and subject preference

"Learners" were more interested in vocational/professional and general-education topics, while "non learners" indicated greater interest in topics related to home and family

There were no significant differences in course preferences between full-time learners and part-time learners. However, these groups were more interested in both vocational/professional and general-education areas than were the non learners. The non learners, instead, indicated greater interest than either of the other learning groups in courses related to the home and family.

F. Preferred Structure of Television-Based Learning Systems

In addition to the clear subject preferences discussed above, the respondents had definite preferences in the way in which they would like a television course presented.

1. FORMAT

A television-based learning system may be organized in a number of ways. For the present sample, the preferred format was viewing the television programs in their own homes. This option was selected by 62 percent, while 25 percent selected viewing television programs in the company of others having similar interests at a convenient location. The remainder (13 percent) preferred viewing videotaped programs on a TV set at a local library at a time of their own choosing.

Most of the sample (62 percent) wanted to watch the programs in their own homes

There were no significant differences in sex, age, income, occupation or level of education in preferred viewing arrangement. However, the in-home viewing situation was preferred by 78 percent of the heavy television viewers (over 21 hours per week) while only 48 percent of those who view less than five hours weekly selected this option ($p < .001$). Those interested in obtaining credits for the courses are more willing to meet with others, but the majority of these (56 percent) still prefer viewing in their own homes.

Viewing in the home was also preferred by those interested in obtaining formal credit for television-based learning

2 BROADCAST TIME AND SEASON

There was a clearly preferred time of day for this viewing to take place. Almost two thirds of the sample selected weekday evenings as the most suitable for them, with the remainder almost equally divided in preferring weekday mornings, afternoons or weekends.

Most respondents preferred that these courses be broadcast two week nights per week in the winter months

Almost the same proportion of the sample (69 percent) selected winter as the time of year most suitable for them to participate in television-based learning courses. This season was preferred by all groups, whatever their age, sex, or occupation.

The remainder of the sample selected the preferred time of year as follows: fall 29 percent, spring 10 percent, summer 4 percent. A further 17 percent of the respondents had no preference, while a number of people (29 percent) choose more than one season as suitable.

Nearly half of the respondents (46 percent) felt that they would be most willing to devote two nights per week to learning via a television program; while 22 percent preferred three times a week, and 19 percent once a week.

3. LEARNING-SYSTEM COMPONENTS

These broadcasts are intended to be only one component in a total learning system. In addition to the television programs, a number of other resources could be used. These supplements include a list of suggested books to read, a text that follows the program, an instructor who could be reached by telephone, workshops directed by a competent person, field trips to places of relevance to the course, or discussions with others interested in the same topics.

Most (83 percent) wanted a television-based learning system to contain other components relevant to their learning

The large majority of the sample (83 percent) indicated that these resources would be valuable in a televised course, while 17 percent felt that the programs alone would be sufficient. These proportions were consistent over all the age groups, with the exceptions of the youngest and the oldest. The age group of 18-to-20-year-olds most strongly preferred print supplements (94 percent) while those over 60 years were least likely to consider these as valuable. The full-time students were the most likely to value supplements highly (95 percent) although no other significant occupational differences prevailed. Part-time learners saw additional resources as less valuable (84 percent) while non learners rated the supplemental material as desirable 74 percent of the time.

The less TV a respondent watches, the more value appears to be placed on additional resources in a TV-based learning system

In addition, there was a negative relationship between the amount of television watched and the desire for supplements. The less television was watched on a weekly basis, the more likely the viewer was to perceive the additional resources as valuable.

Interest in additional resources appears to be related to a respondent's desire to enroll in a TV-based course for credit

These resources were also perceived as more desirable by those respondents who wanted some form of official recognition or credit for the course. This group was significantly more interested in receiving and using supplemental material (91 percent) than were those (73 percent) who indicated no interest in receiving credit for their participation ($p < .001$).

Desire for supplementary material appears to be related to age, learning status, and specific subject interest

Supplements were also seen as more valuable for some subjects than for others. Specifically, in the category of vocational and professional subjects, there was a significantly higher interest in additional material than for hobby and recreational topics. There were no clear differences in a desire for supplements in the other subject areas.

The majority of respondents who did want some kind of supplement had no clear preferences. In many cases more than one kind of material or outside agent was selected as desirable. The respondents indicated that they would be very likely to use or participate in the following:

Table 3: Preferred Supplement

	Percent
A list of suggested books to read	65
A text that follows the program	65
An instructor who can be reached by telephone	66
Workshops directed by a competent person	52
Field trips to places of relevance to the course	50
Discussions with others interested in the same topic	57

It appears that a television-based learning system is most acceptable for the majority of the sample if it is structured to contain both on-air and supplementary material.

It appears that the concept of a television-based learning system is most acceptable for the majority of the sample if it is structured to contain both on-air and supplementary material. The desire for supplements varies, however, according to the specific subject being taught as well as a number of viewer differences.

4. ROLE OF TELEVISED CONTENT

For most of the sample, the television program is seen as one component of a larger learning system. The respondents were asked to evaluate the relative importance of this component in terms of information dissemination.

The respondents were given three alternatives for the role of television in providing the potential course content. The first choice, whereby the television programs provide all or most of the information concerning the subject with little or nothing to be studied from books or other resources, was preferred by nearly half the sample (48 percent). The remainder were evenly divided in preferring that either (a) most of the information come from reading and other study with the television programs helping to illustrate or zero in on certain aspects of the study (26 percent), or (b) the television programs mainly entertain and be designed to stilulate interest in the subject matter with information concerning the specifics provided by books or other resources (26 percent).

Almost half the sample preferred that, within a television-based learning system, the television program provide all or most of the information

There were no sex or age differences noted in these preferences. However, those with a formal education of high school or less were significantly more interested in receiving all or most of the information from television than were those with higher education ($p < .005$).

Similarly, heavy television viewers selected this option more frequently than lighter viewers. This alternative was also preferred by approximately half of the part-time and non-learners compared with 35 percent of the full-time learners ($p < .05$).

More learners than non learners (50 percent vs. 35 percent) preferred not to receive all or most information via television

Not surprisingly, those respondents who would prefer the program alone without any credits or supplements are most likely to want all or most of the information given on television ($p < .001$). Conversely, those who want both supplements and credits for the courses would like most of the information to come from reading or other study.

A majority of those who want both supplements and credits for the courses would like most of the information to come from reading or other study

5. FORMAL STUDENT EVALUATION AND CREDIT

It is possible to offer a television-based course in a number of ways. It may be considered as a general-interest course, and therefore have no formal evaluation or credit. Alternatively, a course of this type might be recognized for credit as part of an academic institution's degree - or diploma-granting program. A further possibility is that a certificate may be awarded by the OECA or through a variety of other organizations

Over half the sample felt that receiving official recognition or credit for participation had at least some importance

Some form of official recognition or credit was considered to be very important for 37 percent of the group, while an additional 18 percent felt that this was somewhat important to them. The remaining 45 percent felt that receiving credit for taking a television-based course was not at all important to them.

Recognition was most desired for "vocational or professional" subjects

The area in which recognition was perceived of as most important was vocational/professional education (58 percent). For the remaining subject areas, credits were less important. The respondents in the sample who felt that credits were very important to them were also most likely to desire written supplements and an instructor ($p < .05$).

There were other differences noted among those who strongly desired credit for their course work. More men than women wanted credits, while lower-income groups were also more likely to make this response. There was also a relationship between age and desire for credit. For example, 66 percent of those aged 18-20 years wanted recognition compared with 22 percent of those aged 50-59 years.

Full-time students (67 percent) were far more likely to want credit than either part-time learners (37 percent) or non learners (27 percent). In addition, blue-collar workers indicated a greater desire for official recognition (57 percent) than any other occupational group except students.

Over half the sample were willing to engage in formal evaluation procedures

Over half the sample wanted official recognition for their course work. The same proportion were willing to undergo formal evaluation procedures.

There was a strong positive relationship between this desire for official recognition and the perceived importance of grades or evaluations, exams and assignments. The following table illustrates these interrelationships.

Table 4: Evaluation Procedure Preferences

	Grades or Evaluations	Exams	Assign-ments
Very important	32%	26%	32%
Somewhat important	22%	19%	30%
Not at all important	46%	55%	38%

Over half want an evaluation or grading procedure, preferably through submitting assignments rather than taking examinations

This might suggest that, for those who consider an evaluation and grading procedure of importance (54 percent), the preferred method of evaluation is by assignment rather than through examinations.

6. COST

Almost half the sample were willing to pay $25 or less for a television-based course of study

There was a wide range in the amount respondents were willing to pay for a television-based learning system, ranging from no cost to over $200 per course. The upper limit for almost half the sample was $25. The exact course fees the respondents suggested are listed below:

Table 5: Preferred Course Fees

	Percentage
Nothing	10
Up to $15	14
$15 to $25	22
$26 to $35	9
$36 to $50	17
$51 to $75	4
$76 to $100	6
$101 to $150	2
$151 to $200	2
Over $200	4
No idea	10

Respondents appeared to be prepared to pay more for courses related to professional or vocational interests than other courses

Both students and those with low family incomes wanted to pay less than the group norm while those who wanted supplements in addition to the program were willing to pay more. Over one quarter of the group who prefer a program shown without any supplements would not be willing to pay anything. All the groups within the sample are prepared to pay more for courses in vocational or professional topics or general education than for the other subject areas.

The acceptable cost of the course was dependent on the topic and the other components provided

In summary, it appears that the cost of any television-based course of study is dependent on the topic and the print and other components provided.

G. Perceived Advantages and Disadvantages of Television-Based Learning

The respondents indicated that the major advantage of television-based learning was the convenience of being able to view at home

Television-based learning had clear advantages for 99 percent of the sample, with the convenience of being able to view at home most frequently mentioned. The breakdown of perceived advantages is in the following table, in order of frequency of mention.

Table 6: Perceived Advantages

	Percentage
Convenience of studying at home; i.e., no travelling	62
Feel more at ease/comfortable studying by myself	12
Can view/study only those portions of interest to me	11
Would expect overall cost to be lower	3
Other	23

The convenience factor was of greater importance to part-time learners and non-learners than to full-time learners

The convenience factor was seen as more important for part-time learners (62 percent) and non learners (63 percent) than for full-time learners (48 percent), but was the most obviously desirable feature of the learning system for all groups.

Over one quarter of the sample felt that the greatest disadvantage was the possibility of interruptions or distractions

When asked about the perceived disadvantages of television-based learning, 27 percent were unable to mention any problems. The most frequently cited disadvantage - the possibility of interruptions or distractions - was most often mentioned by those with children at home. The complete list of possible disadvantages is shown on the following page.

Table 7: Perceived Disadvantages

	Percentage
Possibility of interruptions/ distractions by other household members or visitors/ telephone	29
Might not complete the course, because of the informal nature	13
Would prefer to receive personal instruction	8
Would miss getting out of the house to meet other people interested in the same subject	4
Pace of study is fixed through the programs/with books one can set one's own pace	3
Other	25

The potential advantages of a televised learning system seemed apparent to most respondents. The indications were that these advantages clearly exceeded any disadvantages of the system. This was reflected in the assessment by the sample of the appeal of television-based learning.

H. Appeal of Television-Based Learning

83 percent rated a television-based learning system an attractive alternative to traditional learning opportunities currently available to them

At the conclusion of the telephone survey, the respondents were asked to evaluate the following statement: 'A well-organized television-based course of instruction with print materials and other resources would be an attractive alternative to the learning opportunities currently available to me." Responses to this statement were highly positive, with 83 percent expressing agreement, and 6 percent disagreeing. The remaining 11 percent were undecided.

This favorable response was consistent, whatever the sex, age, education, occupation, or income. However, full-time learners were less likely to agree with the statement than either part-time learners or non learners ($p < .005$).

Reported interest in television-based learning increased as a result of participating in the interview

Interest in participating in a television-based learning system increased in the course of the telephone interview from an initial rate of 61 percent to the final interest level of 83 percent ($p < .001$).

This increased interest appeared to have stemmed from a combination of two factors: increased familiarity with the concept, and, as a result of the respondent's answering the survey, a greater awareness of the suitability of television based learning for him/herself. With the exception of currently full-time learners, this appeared valid for the entire sample.

DISCUSSION

The course should be designed differently for various sub-populations

The results of the present survey indicate the need to design any learning system to meet the specific needs of the intended audience. There was a great deal of variation in the needs of the sample, dependent on their age, sex, income and other characteristics. It is, therefore, necessary to identify relatively stable groups and match them with preferred subjects and formats.

The potential audience might increase considerably through greater awareness

The potential audience for television-based learning is a large one, and might be even larger if there was a greater awareness of specific needs. Merely discussing the system in the course of a telephone call significantly increased interest in participating. The importance of an extensive publicity campaign to increase the awareness of the general public cannot be underestimated.

Although the total potential audience may now be untapped, a large proportion of the current respondents indicated interest.

At the present time, these potential users of a television-based learning system may be generally characterized as follows:

1. The majority of the target audience tended to be between the ages of 20 and 50 years.

2. There is a direct positive relationship between the educational level of the respondents and their interest in participation: the more formal education the respondent has, the more likely he or she is to want to participate.

3. There is a similar positive relationship between the total household income and the desire to participate in a television-based learning system: the greater the household income, the greater the desire to participate.

4. Current viewers of OECA programming were more likely to be interested in television-based learning than were non viewers of educational television.

Within this broad profile were a number of different needs and interests. The respondents indicated interest in a diversity of subjects. These may be approximately divided into two major areas: academic subjects and non-academic subjects.

Academic subjects were most frequently desired, particularly French and history

The academic subjects were most frequently mentioned as desirable. Among these, a strong enthusiasm for French and for history was most apparent. The respondents who had previously identified themselves as full or part-time learners were most interested in scholastically oriented subjects and formats.

Those interested in academic subjects were willing to pay more for this type of course than for a non academic course. For this, they felt that supplementary material, in addition to the televised program, was both necessary and desirable.

Business-related subjects were of interest, particularly among men

Professional or vocational interests were predominantly related to business topics. Men were more than twice as interested in this area as women, particularly in the under-50 age group. Again, these respondents were willing to pay a higher amount for a course of this type than for others. The desire for additional material was most clearly evident in professionally related subjects. These materials included both print materials and direct contact.

Credit was desired for business courses

Official recognition for course participation was most strongly desired for vocational and professional education. An evaluation procedure of some kind was seen as a necessary concomitant of this learning system. In contrast to the preferences of the potential participants in other subjects, these respondents who want both supplements and credits for the courses would like most of the information to come from reading or other study, rather than from the television programs.

More women were interested in crafts or home and family topics

There was considerable interest in non academic subjects as well, particularly in some type of craft, or in areas related to home and family. However, the wants and needs of those preferring courses of this type were quite different than those for the academic or vocational areas.

Generally, women were more interested in home and family subjects, as were those in the mid-age range of 30 to 50 years. Similarly, North American-educated respondents had a stronger preference for home and family and recreational topics than did those educated outside North America.

Respondents want additional learning resources and official credit for academic and business topics. They indicated a willingness to pay higher fees for these courses

The respondents who were most interested in these areas saw less necessity for supplementary materials, preferring to obtain the bulk of the information from the television programs. Perhaps because of this, they expected to pay less for one of these non academic courses than for the more academically oriented subjects. Neither official recognition of participation nor any systematic form of evaluation was perceived as important in these more informal courses.

Personal contact, although desirable, should not be a necessary component of a television-based course

The most clearly perceived advantage in television-based learning is convenience. For a significant proportion of the TVO viewing audience (for example: homemakers, invalids, the elderly, those with young children or those living in remote areas) this may be the only feasible opportunity to continue their education. For this reason it appears that a television-based learning system should not rely strongly on active participation with an instructor. Although this was seen as desirable by some participants, particularly for academic or vocational subjects, this should not be a necessary component of the course. Rather, it might be available as an enrichment to the core content.

The disadvantage of possible distractions could be lessened through frequent summarizing, duplicating and scheduling

The major disadvantage of television-based learning was the possibility of interruptions or distractions by others or by the telephone. There is little that TVO can do to control these factors. However, a frequent summarizing of important points, as well as judicious scheduling, may somewhat alleviate this problem.

In summary, there is a strong desire for a television-based learning system within the major market areas of TVOntario. This desire becomes even stronger when the potential audience is made more fully aware of the possible courses. Depending on the specific subjects, there are differences in both the potential participants and the course structure. There is clearly a large audience for a variety of televised learning systems in Ontario today, and TVOntario is in the unique position of having many of the resources necessary to meet the needs of this audience.

RECOMMENDATIONS

Based on the results of the present survey, these are the recommendations:

1. Given the current interest in and lack of opportunities for television-based learning, the OECA should develop these learning systems for their viewing audience.

2. The desired subjects for these learning systems may be divided into academic (also including vocational and professional interests) and non academic topics; and they should be presented in quite different ways.

3. The most strongly preferred academic areas for future television-based courses of study, French and history, should be considered for detailed development.

4. The most strongly preferred non academic areas for future television-based courses of study (business-related subjects, including management, accounting and computer technology) should be considered for further development.

5. An academic or business course should be structured to include some systematic evaluation and official recognition (e.g., a recognized credit in an academic institution).

6. There is less necessity in a non academic course for either evaluation or recognition.

7. Most of the information in an academic course should be provided by supplementary materials, with the television programs used for illustration and to stimulate interest in the subject matter.

8. Most of the information in a non academic course should be provided by the television programs, with little or nothing remaining to be studied from books or other resources.

9. Successful completion of a course should be possible without participation in such activities as group meetings or field trips; however, these should be made available as an enrichment to the course content.

10. The average cost of a television-based course should be $25, with the cost of a non academic course somewhat lower, and the cost of an academic course somewhat higher, depending on the amount of supplementary material provided for each course. However, no course fee should exceed $50.

11. The most desirable format for a television-based learning system is two programs per week, broadcast weekday evenings.

12. If the courses are broadcast during the weekday, the major potential audience at that time (homemakers) prefer subjects related to home and family, such as child behavior or parent education.

13. The most desirable time of year for presentation of a television-based learning system is winter, with a smaller but still significant potential audience in the fall. The proportion of those interested in television-based courses in the summer is very small, in comparison.